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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/584,977	06/02/2000	Masanao Fujieda	04917.0075	3091

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EXAMINER

HESELDTINE, RYAN J

ART UNIT

PAPER NUMBER

2623

DATE MAILED: 11/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/584,977	<b>Applicant(s)</b> FUJIEDA, MASANAO	
	<b>Examiner</b> Ryan J Hesseltine	<b>Art Unit</b> 2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 27 September 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 19,22,27 and 29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 19,22,27 and 29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 June 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                    | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on September 27, 2004 has been entered.

### ***Response to Arguments***

2. The rejection of claims 20, 21, 23-26 and 28 are rendered moot by applicant's cancellation of those claims.
3. Applicant's arguments on pages 6-8, filed July 26, 2004 have been fully considered but they are not persuasive.
4. On page 7, first paragraph, applicant states, "Flom does not disclose or suggest how to associate eye measurement data with the iris image, nor does Flom disclose or suggest any surgical purpose for using the identity judgment." The examiner understands that Flom does not disclose a surgical purpose for using the identity judgment, but that is the reason for relying upon L'Esperance, which discloses a refractive correction apparatus. The examiner believes that Flom meets the claim limitation of a "storage means for storing the obtained measurement data...in association with the obtained identification code" since it is disclosed that an image is obtained and stored when the pupil has been driven to the desired size (column 5, line 38-56), after which a set of descriptors are extracted from the image to be compared with the descriptors of a stored reference image (column 7, line 44-64), wherein an individual's descriptor set may be stored on

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a credit card, identification card, identifying document, or in the memory of a computer system (column 12, line 3-10).

5. On page 7, second paragraph, applicant states, "in order to judge whether measurement data belongs to a certain patient, the measurement data is transmitted in association with the first identification code, obtained based on the iris image photographed at the time of measurement".

On page 7, last paragraph, applicant states, "L'Esperance neither discloses nor suggests transmitting data such as topography data of the cornea in association with a first identification code based on an iris image." The examiner respectfully disagrees. None of the pending claims in the instant application state that the measurement data is transmitted in association with the first identification code. Claims 19 and 27 state that the measurement data is stored in association with the obtained first identification code, which the examiner believes is satisfied by Flom.

6. On page 8, second full paragraph, applicant states, "there is no suggestion or motivation in the references, nor has the Examiner suggested any motivation to persons of ordinary skill in the art, to combine Flom and L'Esperance." The examiner respectfully disagrees. The examiner believes Flom and L'Esperance are fully combinable since they both deal with measuring characteristics of a person's eye and it would have been obvious to one of ordinary skill in the art at the time the invention was made to generate surgical correction data based on measured refractive data necessary for refractive correction as taught by L'Esperance in order to correct a patient's eye for refractive errors by providing an ophthalmological surgeon with corneal thickness and topological data for a particular abnormal eye in order to determine the depth of surgical incision (column 2, line 58-62), and to record identifying data of the patient such as the

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age and sex of the patient and other factors which would allow close comparison of the evaluated eye with an idealized model (column 5, line 29-41).

7. The examiner notes that cancelled claims 20 and 21, which were rejected further in view of McMillen et al., have been partially or completely integrated into claim 19 and that no arguments have been set forth with respect to McMillen et al. Additionally, claims 27-29 were rejected in view of Flom and further in view of McMillen and also have not been discussed in applicant's arguments. Also note that neither claim 27 nor claim 29 disclose that the examination data obtained by the examination apparatus is related to refractive power or corneal shape or that the measurement data is used for performing surgery for the refractive correction on the eye.

***Claim Rejections - 35 USC § 102***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 27 and 29 are rejected under 35 U.S.C. 102(b) as being anticipated by Flom et al. (USPN 4,641,349, previously cited, hereafter Flom).

10. Regarding claim 27, Flom discloses an ophthalmic system comprising an eye examination apparatus for obtaining examination data on a patient's eye and photographing the eye (column 5, line 22-37), and a data management apparatus, wherein the eye examination apparatus comprises: first identification code acquiring means for extracting a characteristic, which is inherently unique to the eye, by processing a first image of the eye photographed by the

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examination apparatus (column 4, line 37-45), and obtaining a first identification code (descriptor set) based on the extracted characteristic (column 7, line 44-51); and first storage means for storing the examination data obtained by the examination apparatus in association with the obtained first identification code as an examination data file (column 5, line 42-56; column 12, line 3-10) and wherein the data management apparatus comprises: second identification code acquiring means (column 7, line 15-20) for extracting the characteristic by processing a second image of the eye, and obtaining a second identification code (descriptor set) based on the extracted characteristic (column 7, line 44-51); second storage means for storing the obtained second identification code so as to compare with the first identification code (column 7, line 10-29); comparison means for comparing the first identification code and the second identification code to judge whether the first identification code and the second identification code match (column 11, line 65-column 12, line 3); and third storage means for storing the examination data in a data area assigned by the second identified code when the comparison means judges that the first identification code and the second identification code match (column 12, line 3-17).

11. Regarding claim 29, Flom discloses that the first and second identification code (descriptor) acquiring means obtain the first and second identification codes (descriptors based on an iris pattern of the eye respectively (column 4, line 37-45, line 66-column 5, line 12; column 7, line 44-51).

***Claim Rejections - 35 USC § 103***

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 19 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Flom in view of McMillen et al. (USPN 6,296,634, previously cited, hereafter McMillen) in view of in view of L'Esperance (USPN 4,669,466, previously cited).

14. Regarding claim 19, Flom discloses an ophthalmic system comprising an ophthalmic measurement apparatus, wherein the ophthalmic measurement apparatus comprises: optometry means for examining or measuring a patient's eye to obtain measurement data (pupil size) of the eye (column 5, line 22-37); first photographing means (video camera; column 7, line 10-15) for photographing the eye (column 4, line 66-68); first identification code acquiring means for extracting a characteristic (descriptor), which is inherently unique to the eye (column 4, line 37-45), by processing a first image of the eye photographed by the first photographing means and obtaining a first identification code (descriptor set) based on the extracted characteristic (column 7, line 44-64); and storage means for storing the obtained measurement data (column 5, line 42-56) *or surgical data generated based on the obtained measurement data* (emphasis added since it is referred to in the alternative) in association with the obtained first identification code (column 12, line 35-10), and second photographing means for photographing the eye (column 7, line 15-20); second identification code acquiring means for extracting the characteristic by processing a second image of the eye photographed by the second photographing means and obtaining a second identification code based on the extracted characteristic (column 7, line 44-57); comparison means for comparing the first identification code received from the ophthalmic

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measurement apparatus and the obtained second identification code to judge whether the first identification code and the second identification code match (column 7, line 57-64).

15. Flom does not disclose that the ophthalmic system comprises a refractive surgery apparatus comprising surgery means for performing surgery for the refractive correction of the eye based on surgical data generated from measurement data and does not explicitly disclose storing the obtained measurement data of the eye necessary for refractive correction (or surgical data generated based on the obtained measurement data) in association with the obtained first identification code, or permission means for permitting the surgery to be performed by the surgery means. McMillen discloses an ophthalmological surgery technique with an active patient data card providing the surgery apparatus with identifying data including the serial number of the specific laser surgery system to be used, personal identification number of the surgeon qualified to operate the system, patient identification and history, and the prescription of the patient to permit the surgery to be performed and control the amount and type of laser surgery on a particular patient (column 2, line 55-column 3, line 10; column 4, line 54-column 5, line 7). It would have been obvious to one of ordinary skill in the art at the time the invention was made to control access to an eye surgery apparatus as taught by McMillen in order to ensure that the correct surgical procedure is performed on the person for which it was intended, by a person (surgeon) who is authorized and capable of performing it (column 2, line 55-column 3, line 10; column 5, line 8-17).

16. Neither Flom nor McMillen disclose that the obtained measurement data is data on refractive power or a corneal shape of the eye necessary for refractive correction. L'Esperance discloses a method and apparatus for analysis and correction of abnormal refractive errors of the



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eye wherein measurement data (corneal topography, axial length, intraocular pressure, etc.) includes refractive power or a corneal shape of the eye necessary for refractive correction and that surgical data is generated based on the measurement data (column 5, line 29-58).

L'Esperance further discloses a refractive surgery apparatus including: surgery means (laser sculpting means G) for performing surgery (corrective operation) for the refractive correction on the eye based on the surgical data (column 7, line 33-51). It would have been obvious to one of ordinary skill in the art at the time the invention was made to generate surgical correction data based on measured refractive data necessary for refractive correction as taught by L'Esperance in order to correct a patient's eye for refractive errors by providing an ophthalmological surgeon with corneal thickness and topological data for a particular abnormal eye in order to determine the depth of surgical incision (column 2, line 58-62), and to record identifying data of the patient such as the age and sex of the patient and other factors which would allow close comparison of the evaluated eye with an idealized model (column 5, line 29-41).

17. Regarding claim 22, Flom discloses that the first and second identification code (descriptor) acquiring means obtain the first and second identification codes (descriptors based on an iris pattern of the eye respectively (column 4, line 37-45, line 66-column 5, line 12; column 7, line 44-51).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan J Hesseltine whose telephone number is 703-306-4069. The examiner can normally be reached on Monday - Friday, 8:30 AM - 5 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amelia Au can be reached on 703-308-6604. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ryan J. Hesseltine  
November 9, 2004

JINGSEWU  
PRIMARY EXAMINER

